



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBW7839-2G-1
Job Sheet 172656



Part No: RBW7839-2G-1

Job Qty: 1 ea

Part Name: Quill



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/21/18

Job Tracking No:

Due Date: 3/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW7839-2G Rev 5 IPP Rev A 18.02.13 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		3/15/18	0.00	0.00	Start Up Machining-4		18-4-3
120	Mori Seiki	1 pcs		3/16/18	0.00	1.00	MORI SL-154		18
130	QC	1 pcs		3/16/18	0.00	0.00	QC2 Machining-5		18
140	QC	1 pcs		3/16/18	0.00	0.00	QC8 Machining-5		18-04-05
170	Outsource	1 pcs		3/16/18	0.00	0.00	Outsource4		18-4-9
180	Packaging	1 pcs		3/16/18	0.00	0.00	Packaging2		18-04-18
190	QC	1 pcs		3/16/18	0.00	0.00	QC6		38
200	Packaging	1 pcs		3/16/18	0.00	0.00	Packaging3-2		18-04-19
210	QC21-SA	1 Ea		3/16/18	0.00	0.00	QC21		GA099

Part Op 120 - 1-Machine as per folio FB 905 FOLIO REV: _____ DWG REV: _____ 2-Debr
Descriptions: 130 - Engrave T/N and/or P/N number using Marktronic engraver as per DWG.
170 - -Issue P/O to ATG : PO _____ -ANODIZE COLOR RED, PER IAW MIL-A-8625 TYPE-2 CLASS-2, Water
sealant -Certificate of Conformity is required
180 - Receive
200 - Identify and Stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M6061T6R1.125	6061 Round Bar 1.125	.2440 ft (.244 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M6061T6R1.125	0	7	0

Part Specifications

could not be found.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S057796



Part: RBW7839-2G-1

Job No: 172656

Serial No/Batch: S057796

Revision: 5

Inspector:

Plex 2/21/18 9:52 AM Dart.lajeunesse.marie

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

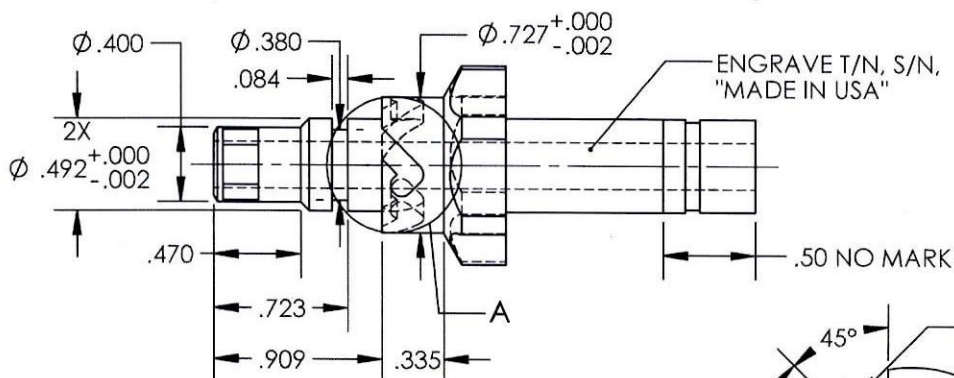
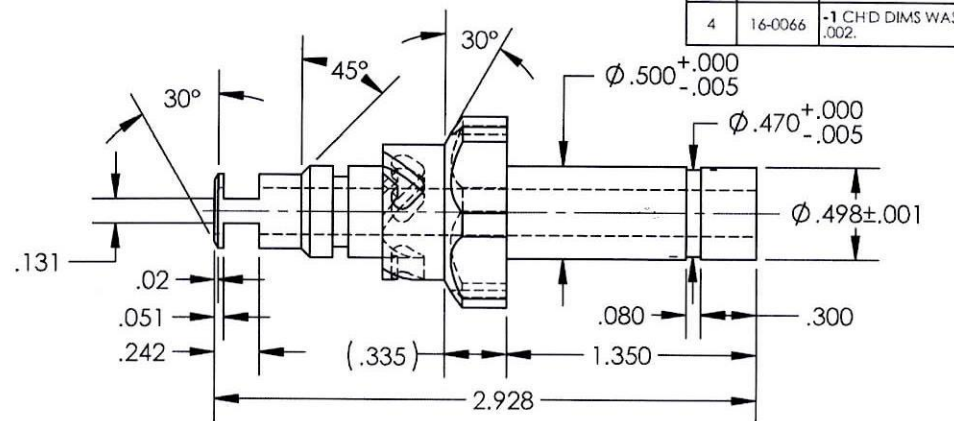
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

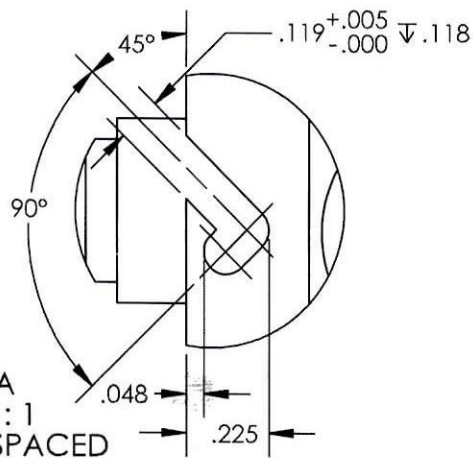
This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CH'D TITLEBLOCK & REV BLOCK, CH'D T/N FROM RBW7839, CH'D INK STAMP NOTE, -1 CH'D ANGLE OF GROOVE PER G.E.	8/20/2009	RJC	RW
1A		CH'D TOOL NAME FROM MAIN GEAR BOX DRAIN TOOL PER E.B.	11/28/2011	RJC	RW
2		MODIFIED -1 TO WORK WITH COUPLING, ADDED COUPLING, TUBE, AND CAPS, DELETED CRIMP HOSE CLAMP AND LABEL, CH'D HOSE FROM Ø5/8 TO Ø1/2.	7/27/2012	JAG	SE
3		-1 CH'D O.D. PROFILE WAS (8XR.165) IS (6X R.375), SLOT DIM WAS .119 IS .119 +.005/-.000.	2/26/2013	BIM	GE
3A		-9 CH'D DIM WAS 3.78 IS 3.68, -13 CH'D MATERIAL TO NEW PIG CORP. #PAD210, -1 CH'D DIM WAS .020 IS .02, WAS Ø.250 THRU IS Ø.25 THRU, DELETED 6X .106, .082, CH'D NOTE WAS 6X R.375 EQUALLY SPACED IS 6X R.38 EQUALLY SPACED ON Ø1.60 B.C.	2/5/2014	DPD	RW
4	16-0066	-1 CH'D DIMS WAS Ø.729 +.000/-.002 IS Ø.727 +.000/-.002, WAS 2X Ø.494 +.000/-.002 IS 2X Ø.492 +.000/-.002.	6/30/2016	RJC	SM

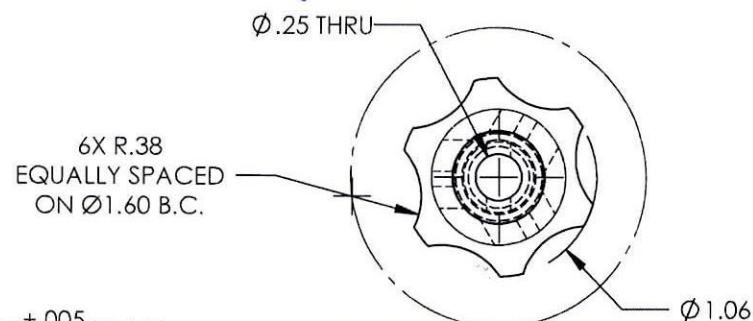


(-1)
QUILL

DETAIL A
SCALE 2 : 1
3X EQUALLY SPACED



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 1726576 MJS
1802-21



DART AEROSPACE	
TITLE IGB & TGB OIL DRAIN TOOL	
DWG NO. RBW7839-2G-1	REV 5
MAT'L 6061	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH RED ANODIZE	.XX ± .01 ANGLES ± 5°
SPEC MIL-A-8625F, TYPE II, CLASS II	.X ± .1 SURFACES = 125/√
DRAWN BY: PERRITT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	AW139
SCALE 1:1	DATE 11/12/2008
SHEET 2 OF 3	

OQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER :					

DART AEROSPACE LTD		Work Order:	172656
Description: Quill		Part Number:	RBW7839-2G-1
Inspection Dwg: RBW7839-2G-1	Rev: 5	Page 1 of 1	

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
30°	±.5°	30°	/			
.131	±.005	.133	/		VERW	SL-1
-.02	±.01	-.020	/			
-.051	±.005	-.051	/			
-.242	±.005	-.245	/			
-.335	±.005	-.335	/			
2.928	±.005	2.928	/			
1.350	±.005	1.351	/			
.080	±.005	.08	/			
.300	±.005	.300	/			
.498	±.001	.4985	/		mic	SL-4
.470	+0 -.005	.468	/		VERW	
-.500	+0 -.005	.4985	/		mic	-
30°	±.5°	30°	/			
45°	±.5°	45°	/			
.492	+0 -.002	.491	/			
.470	±.005	.470	/			
.723	±.005	.725	/			
-.909	±.005	-.909	/			
-.335	±.005	-.335	/			
.727	+0 -.002	.726	/		mic	
-.380	±.005	-.381	/		VERW	
-.084	±.005	-.084	/			
.400	±.005	.400	/			
-.048	±.005	-.049	/			
-.225	±.005	-.223	/			
-.119	±.005	-.124	/			
±.118	±.005	-.115	/			
Ø.25	±.01	-.251	/			

Measured by:	JL	Checked by:	B.A	QC Inspector:	
Date:	18-4-3	Date:	18-04-05	Date:	

Engineering Approval: (If necessary)		Date:	
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Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039539**

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO039539
PO Date: 4/9/18
Due Date: 4/27/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula
Phone:
Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	171156	646.2910	Deflector Issue P/O to ATG : Hard Anodize, Color Black / Prime As per Dwg 646.2900 Rev. N/C	Firmed	4/27/18	8 pcs	0 pcs	8 pcs	\$50.80/pcs	\$406.40
2	171158	646.3110	Channel Issue P/O to ATG : 1- Hard Anodize Black and Prime as per Dwg 646.3100	Firmed	4/27/18	12 pcs	0 pcs	12 pcs	\$13.45/pcs	\$161.40
3	174111	646.3110	Channel Issue P/O to ATG : 1- Hard Anodize Black and Prime as per Dwg 646.3100	Firmed	4/27/18	6 pcs	0 pcs	6 pcs	\$13.45/pcs	\$80.70

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	175006	649.5212	Bracket Issue P/O to ATG: AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A- 8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF- 23377 TYPE 1 CLASS N	Firmed	4/27/18	11 pcs	0 pcs	11 pcs	\$11.80/pcs	\$129.80
Line Item Note need ready asap!										
5	175007	649.5214	Bracket Issue P/O to ATG: AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A- 8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF- 23377 TYPE 1 CLASS N	Firmed	4/27/18	11 pcs	0 pcs	11 pcs	\$11.80/pcs	\$129.80
Line Item Note need ready asap!										
6	172542	RBW1205G00231-3G-1	Body -Issue P/O to ATG: -ANODIZE COLOR CLEAR, PER IAW MIL-A-8625F TYPE 2 CLASS 1 WATER SEAL -Certificate of Conformity is required	Firmed	4/27/18	7 pcs	0 pcs	7 pcs	\$12.80/pcs	\$89.60
						7x	At 8/10/17			
7	172656	RBW7839-2G-1	Quill -Issue P/O to ATG : PO -ANODIZE COLOR RED, PER IAW MIL-A-8625 TYPE-2 CLASS-2, Water sealant -Certificate of Conformity is required	Firmed	4/27/18	8 pcs	0 pcs	8 pcs	\$12.80/pcs	\$102.40
						8x	At 8/10/18			
Grand Total:										\$1,100.10
Order Notes										

DAS
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A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914950

Date: 16-Apr-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Diane Baker
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
8 ea	Part: RBW7839-2G-1 Rev: Quill Anodize per MIL-A-8625F, Type II, Class 2, Red, .0004-.0010" (.4 - 1 mils). Water Seal Job: 22860 PO: PO039539 Line: 7		
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>12/14/18</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
Made in Canada.			

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